I CLAIM:

1. A method for damping low-frequency load oscillations in drives having a motor and load a motor rotational-speed control and a load rotational-speed controll comprising damping only in the load rotational-speed control.

2. The method according to claim 1, wherein load-acceleration is connected to an input-end motor rotational-speed setpoint value of the motor rotational-speed control.

3. The method according to claim 2, wherein the load acceleration is measured directly.

4. The method according to claim 2, wherein the load acceleration is determined by differentiating the load rotational speed.

5. The method according to claim 2, wherein the load acceleration is determined from a difference between a motor position and a load position.

6. The method according to claim 2, wherein a difference value formed from the rotational-speed setpoint value and the load rotational speed is connected to the input-end motor rotational-speed setpoint value of the motor rotational-speed control.

7. The method according to claim 6, wherein the difference value for the load rotational-speed control is limited before the connection to the motor rotational-speed setpoint value.

8. The method according to claim 6, further comprising performing a pilot control of a load rotational-speed setpoint value past the load rotational-speed control to the motor rotational-speed control.

9. The method according to claim 1, wherein the load rotational-speed control has at least one proportional and/or one differential control component.

10. The method according to claim 1, wherein a load position control takes place above the load rotational-speed control.

11. The method according to claim 2, wherein the load acceleration is filtered with a filter before connection to an input-end motor rotational-speed setpoint value of the motor rotational-speed control.

12. A cascade control structure for damping low-frequency load oscillations in drives having a motor and load, comprising a subordinate motor rotational-speed control and a superordinate load rotational-speed control.

13. The cascade control structure according to claim 12, wherein a load acceleration is connected to the motor rotational-speed control at the input end is used for damping.

14. The cascade controller structure according to claim 12, wherein the load rotational-speed control is implemented by input-end connection of a difference formed from a rotational-speed setpoint value and load rotational speed value to the motor rotational-speed control.

15. The cascade controller structure according to claim 14, wherein a means for multiplying the difference formed from the rotational-speed setpoint value and load rotational speed value is provided before the connection to the motor rotational-speed control.

16. The cascade controller structure according to claim 14, wherein a means for limiting the difference formed from the rotational-speed setpoint value and load rotational speed value is provided before the connection to the motor rotational-speed control.

17. The cascade controller structure according to claim 12, further comprising providing a pilot control of a load rotational-speed setpoint value past the load rotational speed control to the motor rotational-speed control.

18. The cascade controller structure according to claim 12, wherein the load rotational-speed controller has at least one proportional and/or one differential control component.

19. The cascade controller structure according to claim 12, wherein a load position controller is arranged above the load rotational-speed control.

20. The cascade controller structure according to claim 13, wherein a filter unit is provided for filtering the load acceleration which is connected to the motor rotational speed control at the input end.

21. The method according to claim 2, wherein the load-acceleration is multiplied by a predefined factor.

22. The method according to claim 6, wherein the load rotational speed is multiplied by a predefined factor.